

Research Associate

Job Summary:

The Department of Biochemistry & Molecular Biology at the University of British Columbia will be hiring a Research Associate to join the Dr. Calvin Yip Laboratory.

For more than fifty years, the Department of Biochemistry and Molecular Biology has played an active and important role at UBC and in the greater scientific community. The Department is located in the Life Science Institute (LSI) that is home to approximately 90 research laboratories from fifteen Departments organized into nine research clusters, fostering a strong foundation for innovation and collaborations. All members of the Department maintain active, well-funded research programs that encompass many areas of modern biochemistry, molecular and structural biology. The Department hosts an active Graduate program with more than 90 students and offers over fifteen undergraduate courses and laboratory courses for honours, major and minor Undergraduate programs.

Work Performed:

Reporting to the Principal Investigator, the successful candidate will formulate, design, and lead research projects on characterizing protein complexes that mediate autophagy degradation process.

Key tasks of the candidate include:

- Designing and performing protein expression and purification experiments and associated activity assays.
- Performing protein crystallization and cryo-em specimen preparation, and using x-ray crystallography and molecular electron microscopy to obtain structural information of protein complexes.
- Conducting literature review to develop experimental plan.
- Maintaining a detail laboratory notebook and presenting the results to the principal investigator at request.
- Participating and presenting results at regulator group meetings as well as local and international research conferences.
- Training and supervision of graduate students and undergraduate students.
- Maintaining cell culture facility and mammalian and insect cell lines.
- Maintaining an orderly laboratory environment in compliance with safety regulations.

Education/Work Experience:

The successful candidate will hold a Ph.D. degree in biochemistry. Applicants will have at least five years of post-doctoral training with a demonstrated track record of publication in the field of structural biochemistry. The successful candidate must also have:

Skills:

- Broad knowledge of expression systems and purification strategies of mammalian proteins and protein complexes, molecular cloning, and structure-guided mutagenesis.

- Experience in protein crystallization, and determining macromolecular structures using x-ray crystallography.
- Experience in negative stain and cryo-em specimen preparation and operating a transmission electron microscope.
- Proven project management, supervision and mentorship of graduate students and undergraduate students.
- Excellent communications skills including oral presentation at lab meetings and international conferences.
- Ability to work in a face-paced and demanding team environment.
- Has the drive and enthusiasm to lead and work as a member of a team.

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.